IT Architecture Capability Maturity Model

Introduction

The organizations of the Department of Commerce have made a heavy investment in the development of enterprise-wide IT Architectures. These efforts are a recognition that each Operating Unit's technical environment needs to possess a highly adaptive and enabling infrastructure that reduces integration complexity and lowers the total cost of ownership. We need to ensure that we continue to build on previous efforts and fully realize the benefits of IT Architecture.

Assessments of IT processes within an organization are needed to evaluate where we are and where we should be headed. The Department of Commerce has developed an IT Architecture Capability Maturity Model (CMM) to aid in conducting such assessments. The goal is to enhance the overall odds for success of the IT Architecture by identifying weak areas and providing a defined path towards improvement. As an Architecture matures it should increase the benefits it offers the organization.

Over the past few years many disciplines have developed capability maturity models designed to support process improvement. These include the areas of software development, systems engineering, integrated product and process development, and security.   The process maturity model most IT organizations use or base their models on is the Software Engineering Institute's (SEI) Capability Maturity Model for describing the evolution of software development processes. An evolving/emerging best practice indicates that IT Enterprise Architecture organizations should similarly manage their IT Architecture efforts according to maturity models consistent with the rest of the IT organization.

The IT Architecture CMM developed by the Department provides a framework that represents the key components of a productive IT Architecture process. The CMM delineates an evolutionary way to improve the overall process that starts out in an ad hoc state, transforms into an immature process, and then finally becomes a well-defined, disciplined, and mature process. The CMM is intended to be used annually by each Operating Unit and each CIO to conduct an assessment of the Operating Unit's IT Architecture capability and progress.

The CMM provides three documents to be used as tools in the assessment process:

- The Department of Commerce IT Architecture Maturity Model
- Characteristics of Department of Commerce Operating Units' IT Architecture Processes at Different Maturity Levels
- Department of Commerce IT Architecture Capability Checklist.